

SETUP & OPERATION MANUAL

FEATURES

- Quick lock control levers easily position tool-rest.
- Stable cast-iron frame, head and tailstock to reduce chatter and vibration for smoother turning.
- Maximum distance of 17" between centers.
- Quick release lever for quick belt positioning changes.
- 3 variable speed ranges; 250-800, 550-1700 & 1200-3600.
- Features positive indexing in 15° increments – total 24 indexing positions.
- Heavy-duty 1" diameter tool rest post.
- Maximum distance of 40" between centers with optional bed extension (item # 25-116)

SPECIFICATIONS

SPINDLE SPEED

250 - 3600 RPM

SWING OVER BED

14" (356 MM)

SWING OVER TOOL REST

10 3/4" (273 MM)

DISTANCE BETWEEN CENTERS

17" (432 MM)

SPINDLE THREAD

1" – 8 TPI

TAILSTOCK THROUGH HOLE

3/8" (10 MM)

MORSE TAPER

MT#2 (HEADSTOCK & TAILSTOCK)

SELF EJECTING TRAVEL

2" (51 MM)

TOOL REST

6" (152 MM)

FACE PLATE

3" (76 MM)

INDEXING POSITIONS

24 X 15°

MOTOR

3/4 HP, 110 V, 5 A, 1950 RPM

WEIGHT

93 LBS (42.5 KG)

VARIABLE SPEED "MAXI-LATHE VF"



MODEL #25-114QC MI





GENERAL® INTERNATIONAL

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THANK YOU for choosing this General® International model 25-114QC Variable Speed "Maxi-Lathe VF". This wood lathe has been carefully tested and inspected before shipment and if properly used and maintained, will provide you with years of reliable service. To ensure optimum performance and trouble-free operation, and to get the most from your investment, please take the time to read this manual before assembling, installing and operating the unit.

The manual's purpose is to familiarize you with the safe operation, basic function, and features of this wood lathe as well as the set-up, maintenance and identification of its parts and components. This manual is not intended as a substitute for formal woodworking instruction, nor to offer the user instruction in the craft of woodworking. If you are not sure about the safety of performing a certain operation or procedure, do not proceed until you can confirm, from knowledgeable and qualified sources, that it is safe to do so.

Once you've read through these instructions, keep this manual handy for future reference.

Disclaimer: The information and specifications in this manual pertain to the unit as it was supplied from the factory at the time of printing. Because we are committed to making constant improvements, General® International reserves the right to make changes to components, parts or features of this unit as deemed necessary, without prior notice and without obligation to install any such changes on previously delivered units. Reasonable care is taken at the factory to ensure that the specifications and information in this manual corresponds with that of the unit with which it was supplied.

However, special orders and "after factory" modifications may render some or all information in this manual inapplicable to your machine. Further, as several generations of this model of wood lathe and several versions of this manual may be in circulation, if you own an earlier or later version of this unit, this manual may not depict your machine exactly. If you have any doubts or questions contact your retailer or our support line with the model and serial number of your unit for clarification.

GENERAL® & GENERAL® INTERNATIONAL WARRANTY

All component parts of General®, General® International and Excalibur by General International® products are carefully inspected during all stages of production and each unit is thoroughly inspected upon completion of assembly.

Limited Lifetime Warranty

Because of our commitment to quality and customer satisfaction, General® and General® International agree to repair or replace any part or component which upon examination, proves to be defective in either workmanship or material to the original purchaser for the life of the tool. *However, the Limited Lifetime Warranty does not cover any product used for professional or commercial production purposes nor for industrial or educational applications. Such cases are covered by our Standard 2-year Limited Warranty only. The Limited Lifetime Warranty is also subject to the "Conditions and Exceptions" as listed below.*

Standard 2-Year Limited Warranty

All products not covered by our lifetime warranty including products used in commercial, industrial and educational applications are warranted for a period of 2 years (24 months) from the date of purchase. General® and General® International agree to repair or replace any part or component which upon examination, proves to be defective in either workmanship or material to the original purchaser during this 2-year warranty period, subject to the "conditions and exceptions" as listed below.

To file a Claim

To file a claim under our Standard 2-year Limited Warranty or under our Limited Lifetime Warranty, all defective parts, components or machinery must be returned freight or postage prepaid to General® International, or to a nearby distributor, repair center or other location designated by General® International. For further details call our service department at 1-888-949-1161 or your local distributor for assistance when filing your claim.

Along with the return of the product being claimed for warranty, a copy of the original proof of purchase and a "letter of claim" must be included (a warranty claim form can also be used and can be obtained, upon request, from General® International or an authorized distributor) clearly stating the model and serial number of the unit (if applicable) and including an explanation of the complaint or presumed defect in material or workmanship.

CONDITIONS AND EXCEPTIONS:

This coverage is extended to the original purchaser only. Prior warranty registration is not required but documented proof of purchase i.e. a copy of original sales invoice or receipt showing the date and location of the purchase as well as the purchase price paid, must be provided at the time of claim.

Warranty does not include failures, breakage or defects deemed after inspection by General® or General® International to have been directly or indirectly caused by or resulting from; improper use, or lack of or improper maintenance, misuse or abuse, negligence, accidents, damage in handling or transport, or normal wear and tear of any generally considered consumable parts or components.

Repairs made without the written consent of General® International will void all warranty.

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RULES FOR SAFE OPERATION

To help ensure safe operation, please take a moment to learn the machine's applications and limitations, as well as potential hazards. General® International disclaims any real or implied warranty and holds itself harmless for any injury that may result from improper use of its equipment.

1. Do not operate the wood turning lathe when tired, distracted, or under the effects of drugs, alcohol or any medication that impairs reflexes or alertness.
2. The working area should be well lit, clean and free of debris.
3. Keep children and visitors at a safe distance when the wood turning lathe is in operation; do not permit them to operate the wood turning lathe.
4. Childproof and tamper proof your shop and all machinery with locks, master electrical switches and switch keys, to prevent unauthorized or unsupervised use.
5. **Stay alert!** Give your work your undivided attention. Even a momentary distraction can lead to serious injury.
6. Fine particulate dust is a carcinogen that can be hazardous to health. Work in a well-ventilated area and whenever possible use a dust collector and wear eye, ear and respiratory protection devices.
7. Do not wear loose clothing, gloves, bracelets, necklaces or other jewelry while the wood turning lathe is in operation. Wear protective hair covering to contain long hair and wear non-slip footwear.
8. Be sure that adjusting wrenches, tools, drinks and other clutter are removed from the machine before operating.
9. Keep hands well away from the spindle, the spinning workpiece, and all moving parts. Use a brush, not hands, to clear away chips and dust.
10. Do not use stock containing defects such as checks, splits, cracks, knots or foreign objects. Before starting, inspect stock and remove all foreign objects such as dirt, nails, staples or any object that could damage a tool or become dislodged and fly free and cause injury.
11. Select appropriate turning speed for the size and type of workpiece being turned and use lowest speed when starting a new workpiece.
12. Before turning on the wood turning lathe, make sure the workpiece is securely installed between centers and that all locking levers and moveable or removable parts are tightened down and secured.
13. Adjust the tool rest parallel and as close as possible to the workpiece and before starting the wood turning lathe turn the workpiece by hand, at least one full rotation to make sure that it does not come in contact with the tool rest.
14. Maintain turning tools with care. Keep turning tools sharp and clean for best and safest performance.
15. Avoid working from awkward or off balance positions. Do not overreach and keep both feet on floor.
16. Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning be sure it is properly re-attached before using the tool again.
17. Use of parts and accessories NOT recommended by GENERAL® INTERNATIONAL may result in equipment malfunction or risk of injury.
18. Never stand on machinery. Serious injury could result if the tool is tipped over.
19. Always disconnect the tool from the power source before servicing, changing accessories, performing any maintenance or cleaning, or if the machine will be left unattended.
20. Make sure that switch is in the "OFF" position before plugging in the power cord.
21. Make sure the tool is properly grounded. If equipped with a 3-prong plug it should be used with a three-pole receptacle. Never remove the third prong.
22. Do not use this wood turning lathe for other than its intended use. If used for other purposes, GENERAL® INTERNATIONAL disclaims any real implied warranty and holds itself harmless for any injury, which may result from that use.



ELECTRICAL REQUIREMENTS



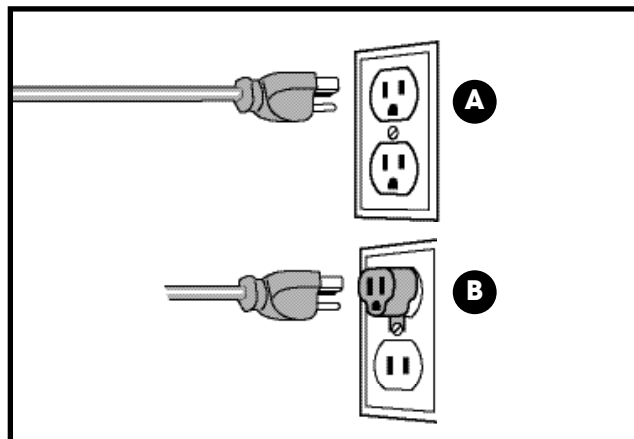
BEFORE CONNECTING THE MACHINE TO THE POWER SOURCE, VERIFY THAT THE VOLTAGE OF YOUR POWER SUPPLY CORRESPONDS WITH THE VOLTAGE SPECIFIED ON THE MOTOR I.D. NAMEPLATE. A POWER SOURCE WITH GREATER VOLTAGE THAN NEEDED CAN RESULT IN SERIOUS INJURY TO THE USER AS WELL AS DAMAGE TO THE MACHINE. IF IN DOUBT, CONTACT A QUALIFIED ELECTRICIAN BEFORE CONNECTING TO THE POWER SOURCE.

THIS TOOL IS FOR INDOOR USE ONLY. DO NOT EXPOSE TO RAIN OR USE IN WET OR DAMP LOCATIONS.

GROUNDING INSTRUCTIONS

In the event of an electrical malfunction or short circuit, grounding reduces the risk of electric shock. The motor of this machine is wired for 110V single phase operation and is equipped with a 3-conductor cord and a 3-prong grounding plug to fit a grounded type receptacle **A**. Do not remove the 3rd prong (grounding pin) to make it fit into an old 2-hole wall socket or extension cord. If an adaptor plug is used **B**, it must be attached to the metal screw of the receptacle.

Note: The use of an adaptor plug is illegal in some areas. Check your local codes. If you have any doubts or if the supplied plug does not correspond to your electrical outlet, consult a qualified electrician before proceeding.



CIRCUIT CAPACITY

Make sure that the wires in your circuit are capable of handling the amperage draw from your machine, as well as any other machines that could be operating on the same circuit. If you are unsure, consult a qualified electrician. If the circuit breaker trips or the fuse blows regularly, your machine may be operating on a circuit that is close to its amperage draw capacity. However, if an unusual amperage draw does not exist and a power failure still occurs, contact a qualified technician or our service department.

EXTENSION CORD

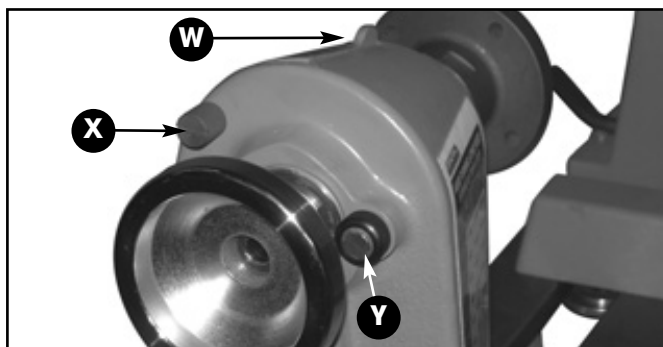
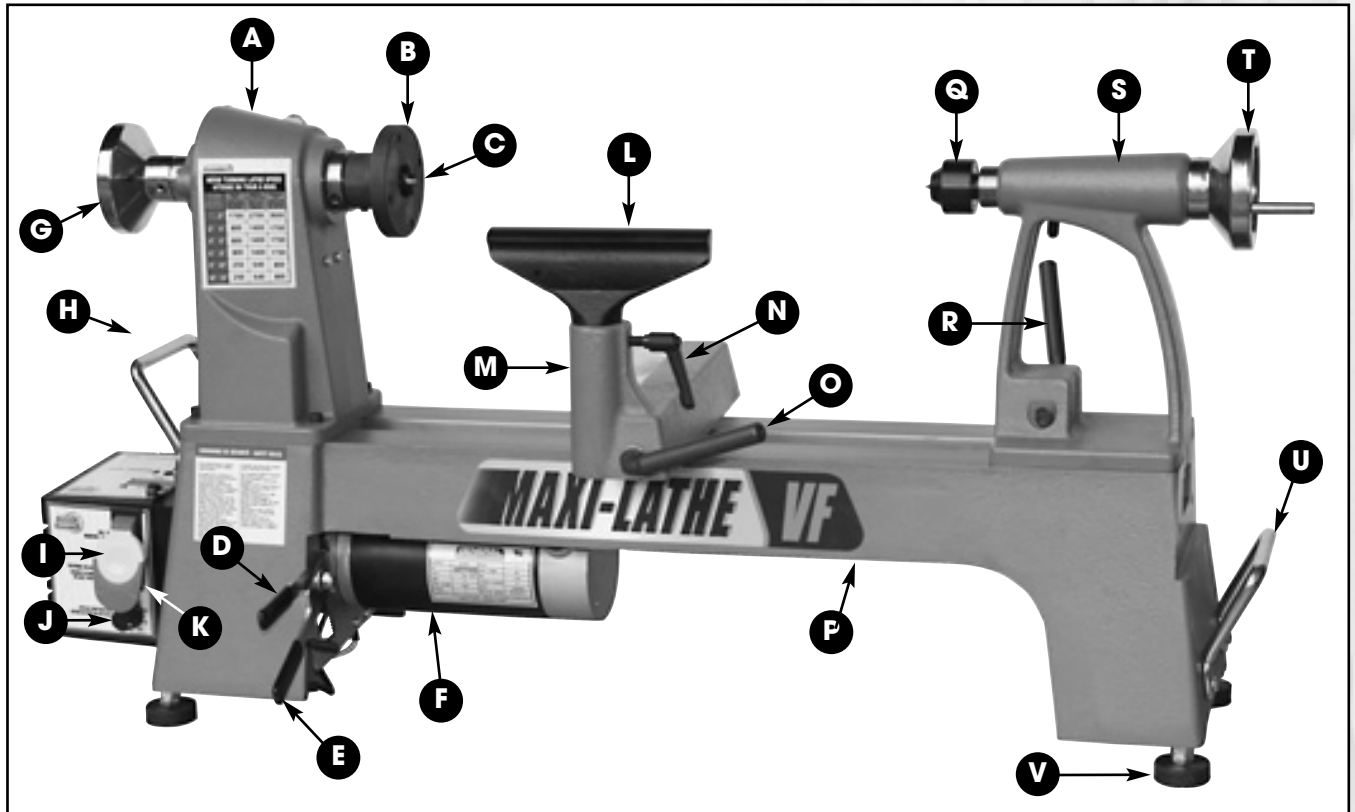
If you find it necessary to use an extension cord with your machine make sure the cord rating is suitable for the amperage listed on the motor I.D. plate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The accompanying chart shows the correct size extension cord to be used based on cord length and motor I.D. plate amp rating. If in doubt, use the next heavier gauge. The smaller the number, the heavier the gauge.

AMPERES (AMPS)	EXTENSION CORD LENGTH			
	25 feet	50 feet	100 feet	150 feet
<5	18	16	16	14
6 TO 10	18	16	14	12
10 TO 12	16	16	14	12
12 TO 16	14	12	*NR	*NR
*NR=Not Recommended				



VARIABLE SPEED "MAXI-LATHE VF" 25-114QC

IDENTIFICATION OF MAIN PARTS AND COMPONENTS



- | | |
|---|--|
| A- HEADSTOCK | N- TOOL REST LOCKING LEVER |
| B- FACE PLATE | O- TOOL REST CARRIAGE LEVER |
| C- SPUR CENTER | P- LATHE BED |
| D- MOTOR PIVOT HANDLE | Q- LIVE CENTER |
| E- MOTOR PIVOT LOCKING LEVER | R- TAILSTOCK LOCKING LEVER |
| F- MOTOR | S- TAILSTOCK |
| G- FLYWHEEL | T- QUILL MOVEMENT HAND WHEEL |
| H- LEFT CARRYING HANDLE | U- RIGHT CARRYING HANDLE |
| I- ON/OFF SWITCH | V- LEVELING FOOT |
| J- SPINDLE SPEED CONTROLLER | W- BELT GUARD |
| K- THERMAL RELAY RE-SET (under the switch) | X- BELT GUARD LOCK KNOB |
| L- TOOL REST | Y- INDEXING PIN (SHOWN INSTALLED) |
| M- TOOL REST CARRIAGE | Z- TAILSTOCK QUILL LOCKING LEVER |

BASIC FUNCTIONS

This General International model 25-114QC M1 Maxi-Lathe VF is designed specifically for small to medium hobby type wood turning projects. With a maximum swing over bed of 14", a distance between centers of 17", and 3 electronically controlled variable speed ranges (250-800, 550-1700 and 1200-3600), the 25-114QC is ideal for small turnings such as pens, as well as bowls and small to medium spindles. A simple belt re-positioning on the drive pulleys, allows the operator to select the desired speed range and the electronic speed controller allows for further fine-tuning within each speed range.

This lathe can be mounted to an optional stand (item # 25-195) or to your own homemade stand, or sitting or secured to your workbench. The 25-114QC comes equipped with a selection of the most commonly used accessories, including a 4" face plate for bowl turning and both live and spur center for typical spindle turning, to allow the user to begin turning (turning tools not supplied) after a few minutes of assembly and set-up, right out of the box.

The 25-114QC Maxi-Lathe VF is designed to be compatible with all aftermarket turning accessories using MT#2 Morse taper in both the headstock and tailstock and the headstock spindle threads are compatible with all 1" dia. x 8 TPI female threaded chucks and face plates.

UNPACKING

Carefully unpack and remove the lathe and its components from the box and check for damaged or missing items as per the list of contents below.

NOTE: Please report any damaged or missing items to your General International distributor immediately.

LIST OF CONTENTS

QTY

A - WOOD LATHE	1
B - LIFTING HANDLE	1
C - FACE PLATE WRENCH	1
D - KNOCK OUT BAR	1
E - SPUR CENTER*	1
F - TOOL REST	1
G - LIVE CENTER*	1
H - LEVELING FOOT W/NUT	4
I - CORD STORAGE HOOK	2
J - FACE PLATE*	1
K - SAFETY GLASSES	1
L - PLASTIC CLIP	3
M - SCREW	1
N - HEX NUT	1
N - INDEXING PIN	1

*Already installed on the lathe



CLEAN UP

The unpainted cast-iron surface of the lathe bed is covered with a protective coating that helps prevent rust from forming during shipping and storage. Remove this protective coating by rubbing with a rag dipped in kerosene, mineral spirits or paint thinner. (Handle and dispose of potentially flammable solvent soaked rags according to manufacturers' safety recommendations.) A putty knife held flat to avoid scratching the surface, may also be used to scrape off the coating followed by clean-up with solvent. Avoid rubbing the lathes painted surfaces as many solvent based products will remove paint.

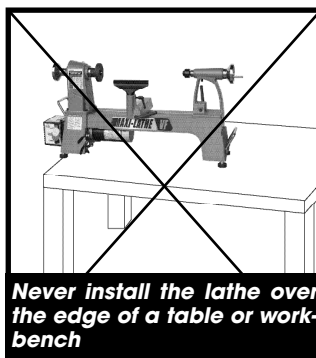
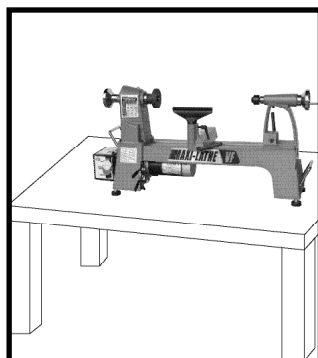
To prevent rust, apply a light coating of paste wax or use regular applications of any after-market surface protectant or rust inhibitor.

INSTALLATION & ASSEMBLY

For your convenience this lathe is shipped from the factory partially assembled and requires only minimal assembly and set-up before being put into service.



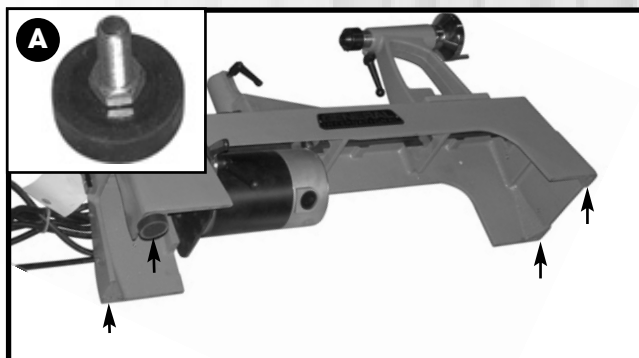
SERIOUS PERSONAL INJURY COULD OCCUR IF YOU CONNECT THE MACHINE TO THE POWER SOURCE BEFORE YOU HAVE COMPLETED THE INSTALLATION AND ASSEMBLY STEPS. DO NOT CONNECT THE MACHINE TO THE POWER SOURCE UNTIL INSTRUCTED TO DO SO.



Never install the lathe over the edge of a table or workbench

The unit should be installed on a flat, sturdy and stable surface able to support the weight of the machine and the workpiece with ease.

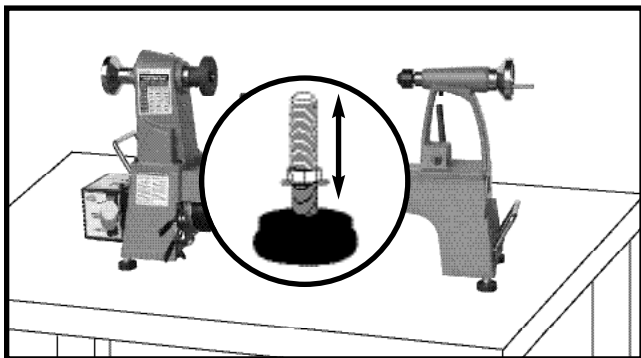
Note: If you prefer an optional steel stand (item 25-195) is available from your local General International dealer. The stand is equipped with mounting holes allowing the lathe to be bolted directly to the stand (hardware not included).



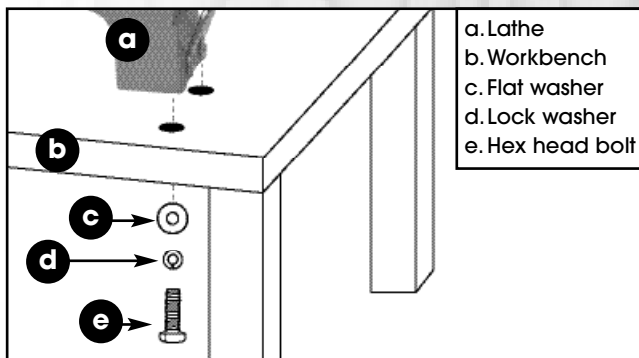
1. If the lathe is not to be used with an optional stand, install the leveling feet **A and set the lathe on your workbench.**



FOR YOUR SAFETY IT IS ESSENTIAL THAT THE MACHINE DOES NOT ROCK OR TIP DURING OPERATION. UPON START-UP OR DURING OPERATION, IF YOU NOTICE ANY ROCKING, TIPPING OR CHATTERING OF THE BASE TURN THE MACHINE OFF IMMEDIATELY AND READJUST THE LEVELING FEET AS NEEDED TO STABILIZE THE LATHE ON THE BENCH.



2. Adjust the leveling feet to ensure that all four feet sit firmly on the bench. Make sure that the machine does not rock.



Note: If a permanent shop placement is practical, consider removing the leveling feet on the base and drilling matching through-holes in the mounting surface of your workbench to bolt the lathe in place on your workbench (hardware not included).

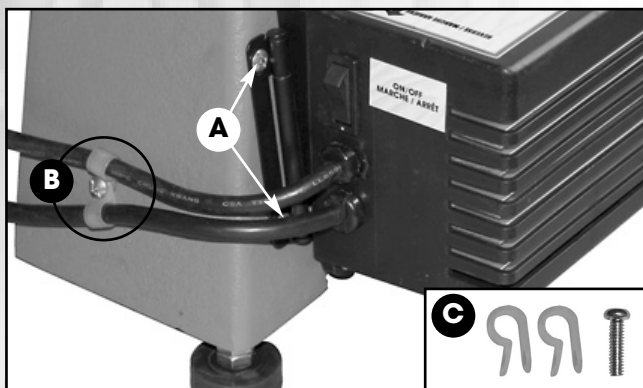
ATTACH THE CORD STORAGE HOOKS



Attach the two cord storage hooks **A** to the rear of the lathe using the Phillips head screws already mounted on the lathe, as shown **B**.

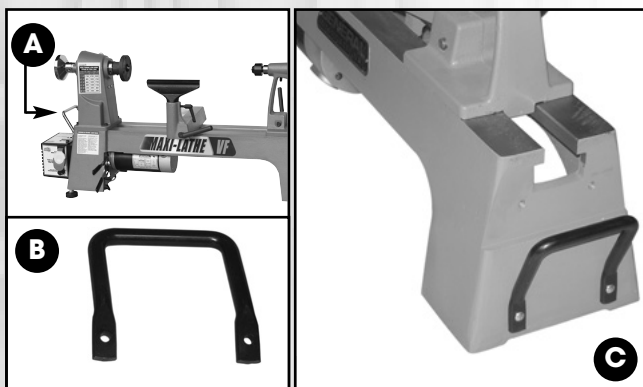
*Note: Two plastic clips are mounted on the rear of the lathe for convenient knock out bar storage **C**.*

ATTACH THE CONTROL BOX TO THE LATHE



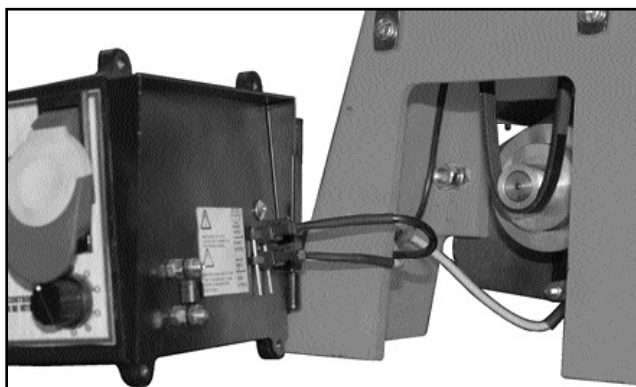
1. Attach the control box to the left side of the lathe using the two Phillips head screws already mounted on the lathe, **A**.
2. Attach the two power cords of the control box to the rear of the lathe as shown in **B**, using the supplied screw and two plastic clips **C**.

ATTACH THE RIGHT CARRYING HANDLE



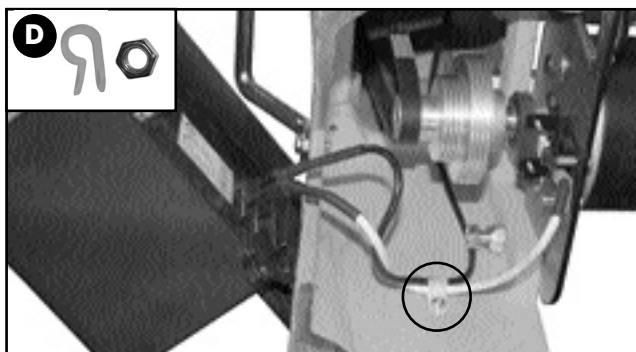
The left carrying handle is already installed on the lathe **A**. Attach the right lifting handle **B** to the right side of the lathe using the two Phillips head screws already mounted on the lathe, **C**.

CONNECT THE CONTROL BOX TO THE MOTOR



MAKE SURE THAT THE LATHE IS NOT CONNECTED TO A POWER SOURCE.

Connect the white wire from the motor to the lower connector on the control box and the black wire to the upper connector on the control box.



LATHE UNDERSIDE VIEW

3. Attach the white and black wires to the internal face of the left rear leg of the lathe as shown, using the remaining clip and the supplied hex nut **D**.

INSTALL THE TOOL REST



Install the tool rest on the tool rest carriage.

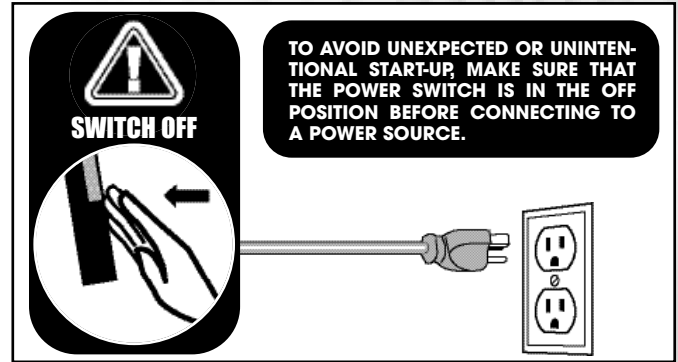
BASIC ADJUSTMENTS & CONTROLS

CONNECTING TO A POWER SOURCE

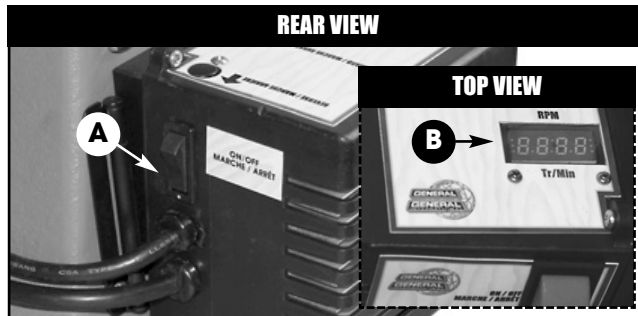


TO REDUCE THE RISK OF SHOCK OR FIRE DO NOT OPERATE THE UNIT WITH A DAMAGED POWER CORD OR PLUG. REPLACE DAMAGED CORD OR PLUG IMMEDIATELY.

Once the assembly steps have been completed and the unit is safely secured to a work surface, plug the power cord into an appropriate outlet. Refer back to the section entitled "ELECTRICAL REQUIREMENTS" and make sure all requirements and grounding instructions are followed.



ON/OFF POWER SWITCH



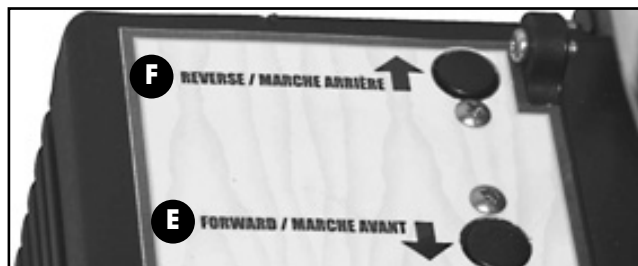
This lathe is equipped with a power on/off switch **A**, located at the rear of the control box. With the switch in the "ON" position (as shown in **A**), the spindle speed read-out will show "0" **B**.

ON/OFF SWITCH WITH SAFETY KEY



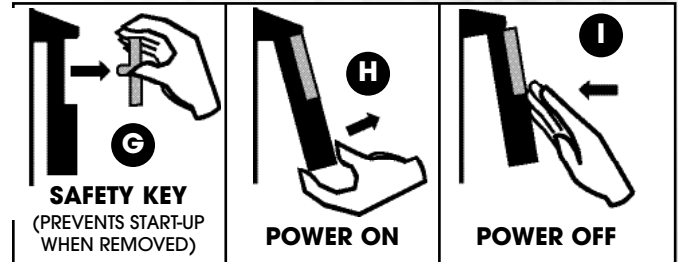
The lathe is equipped with a rocker style ON / OFF switch **A** located on the front of the control box, that is equipped with a lock-out key **B** to prevent unwanted or unauthorized start-up.

SPINDLE DIRECTION SWITCH



This lathe is also equipped with a forward button **C**, and a reverse button **D**.

STARTING / STOPPING THE LATHE



To start the lathe:

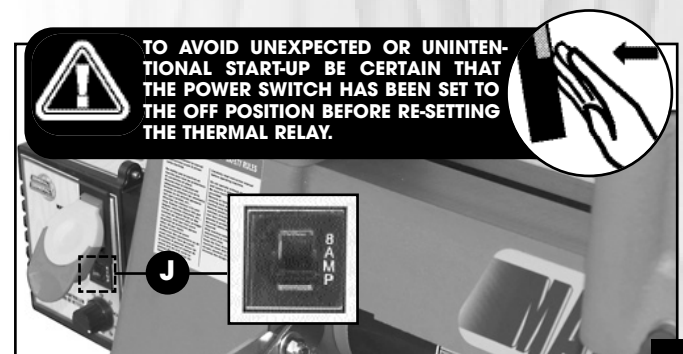
1. Insert the lock-out key, **E**.
2. Select the spindle direction, either FORWARD **C** or REVERSE **D**.
3. Pull up on the lower portion of the switch, **F**.

To stop the lathe: Push down on the switch, **G**.

THERMAL RELAY / CIRCUIT BREAKER

The unit is equipped with a thermal relay (circuit breaker) located under the on/off switch, **J** to protect the motor from power surges or spikes in line voltage. In the event of a power surge, the thermal relay will be automatically tripped thereby cutting off the power to the motor.

To reset the thermal relay after it has been tripped: set the power switch to the "off" position and press the thermal relay re-set button **J**, then restart the machine.



SPINDLE SPEED CONTROL

The spindle speed ranges from 250 to 800, 550 to 1700 and from 1200 to 3600 Revolutions Per Minute (RPM), depending on the positioning of the drive belt on the pulleys.

Note: Refer to the Speed Recommendations chart below for speed selection.

The spindle speed control knob **K** is located on front of the control box.

- Turn the knob clockwise to increase the spindle speed;
- Turn the knob counter-clockwise to decrease the spindle speed.

REFERENCE CHART FOR SPINDLE SPEED SELECTION*

WORKPIECE DIAMETER	ROUGHING	GENERAL CUTTING	FINISHING
	REVOLUTIONS PER MINUTE (RPM)		
UNDER 2"	1700	2750	3600
2 - 4"	800	1400	1700
4 - 6"	800	1400	1700
6 - 8"	800	1400	1700
8 - 10"	300	640	800
10 - 12"	300	640	800

*The information in this chart is supplied as a general guideline only.

Note: Turning speeds vary depending on the size and diameter of the workpiece as well as which stage you are at in the overall turning process. When turning a smaller diameter workpiece, a higher spindle speed is recommended. Proper spindle speed selection comes with practice and experience and when in doubt always start at a slower speed increasing when you are sure that it is safe to do so.

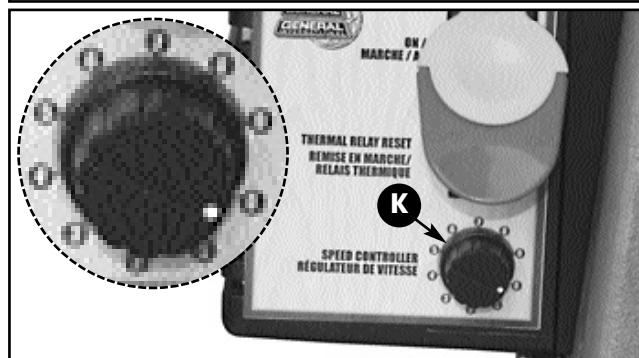
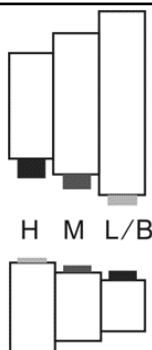
3 SPEED RANGES

High: 1200-3600 RPM

Medium: 550-1700 RPM

Low: 250 to 800 RPM

Changing between the 3 speed ranges requires moving the drive belt from one set of drive pulleys to another (H, M or L). The speed range will vary.

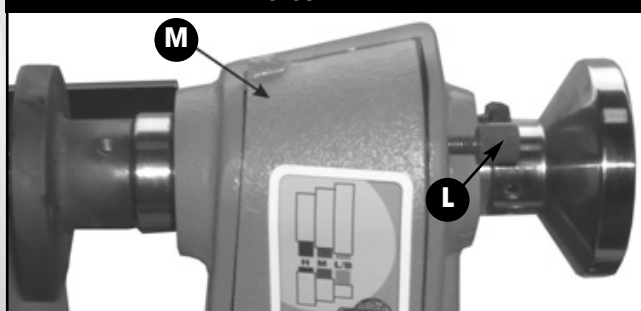


CHANGING SPINDLE SPEED RANGE



TURN OFF AND UNPLUG THE MACHINE FROM THE POWER SOURCE BEFORE OPENING THE BELT GUARD OR BEFORE PERFORMING ANY MAINTENANCE OR ADJUSTMENTS.

HEADSTOCK REAR VIEW

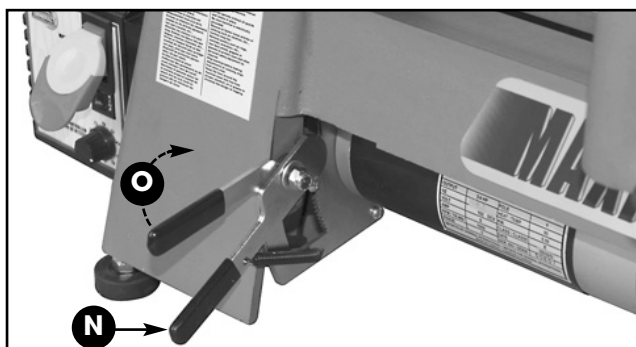


1. To access the belt and pulleys, loosen the belt guard lock knob **L** and open the belt guard located on the headstock **M**.

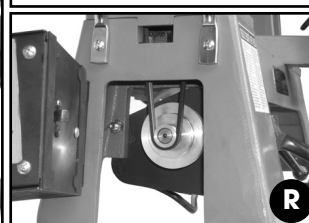
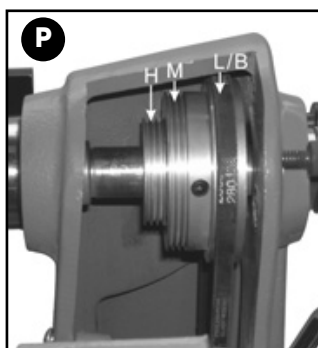
4. Set the belt by hand to the required pulley position (High/Medium/Low), **P**.

Note: Pivot the control box away, **Q**, for an easy access to the lower pulleys **R**.

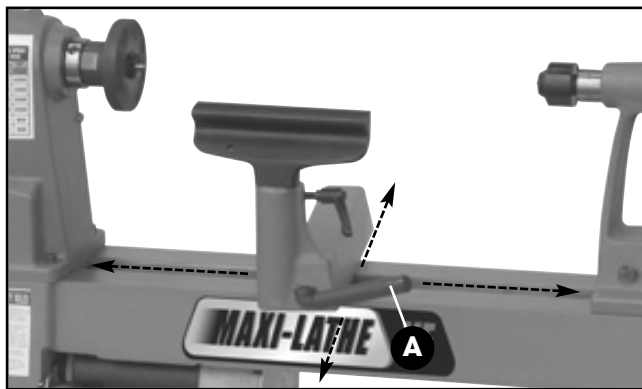
5. Push down on the motor pivot handle to re-tension the belt and retighten the motor pivot locking lever.



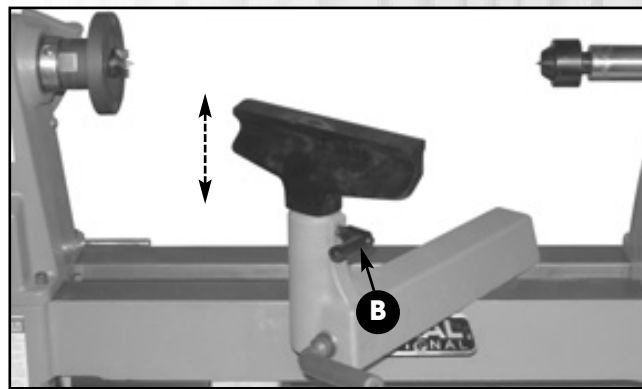
2. Release the motor pivot locking lever **N**.
3. Release the tension on the belt by pulling the motor pivot handle up **O**.



TOOL REST CARRIAGE & TOOL REST ADJUSTMENTS

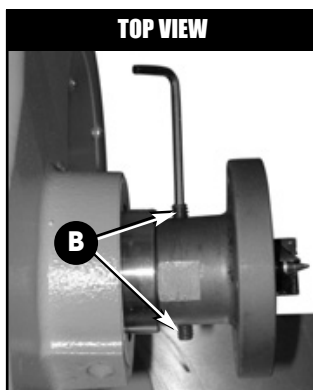
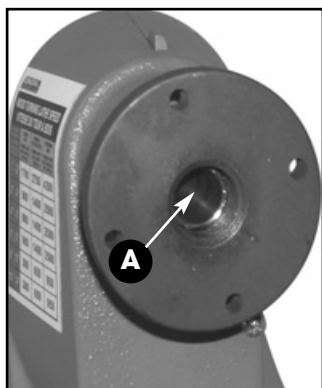


The tool rest carriage can be moved along the bed side ways as needed. Loosen the tool rest carriage lever **A** and move the carriage to the desired location. Re-tighten the lever securely after adjustment.



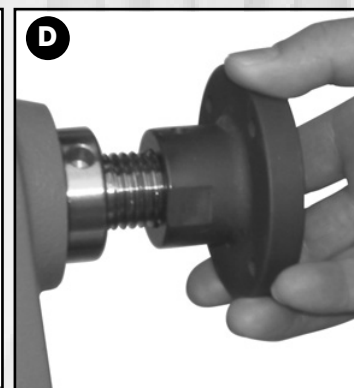
The tool rest should be adjusted so that its top is 1/8" above the center of the workpiece. Loosen the tool rest locking lever **B** and adjust the height and position of the tool rest as needed. Re-tighten the lever securely after adjustment.

MOUNTING & REMOVING THE HEADSTOCK SPUR CENTER

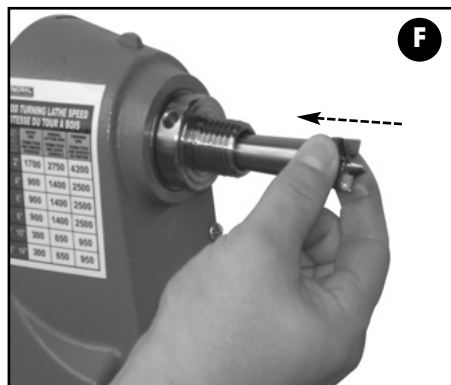


The headstock spindle has an MT#2 taper hole **A** into which the spur center fits.

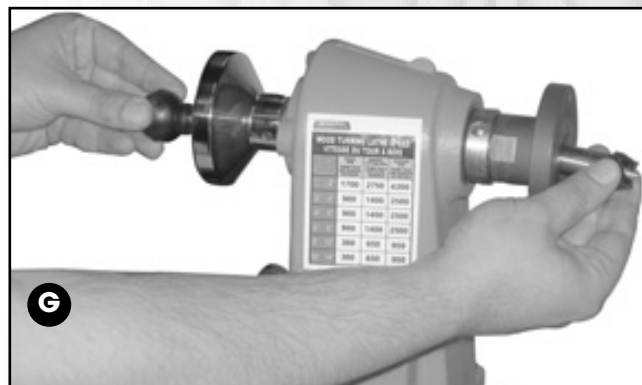
1. Unlock the face plate by loosening and removing the two set screws **B** using a 3 mm Allen key.



2. Loosen the face plate by inserting the supplied knock out bar in the spindle hole to keep the spindle from turning while loosening the face plate using the supplied face plate wrench, as shown in **C**.
3. Unscrew and remove the face plate, **D**.



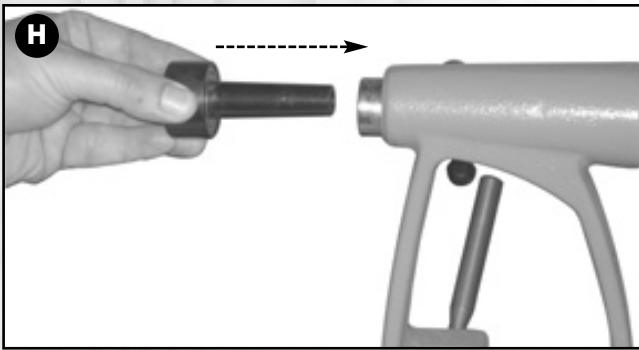
4. Make sure the shank of the spur center **E** and the spindle hole are clean and free of debris, and then fit the spur center firmly in the spindle hole by hand **F**.



To remove the headstock spur center: knock it out from the opposite end of the spindle, using the supplied knock-out-bar **G**.

Note: When knocking out the spur center, always hold it by hand to prevent it from falling.

MOUNTING & REMOVING THE TAILSTOCK LIVE CENTER



The tailstock has an MT#2 taper hole into which the live center fits.

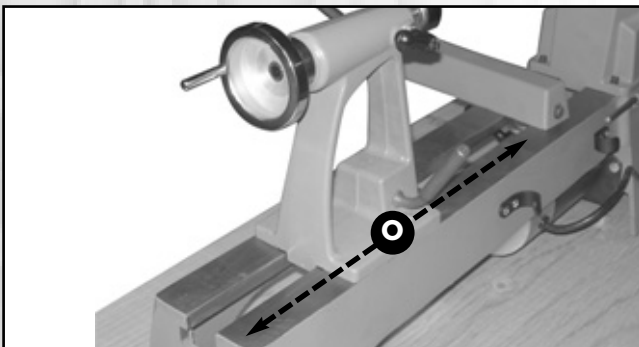
1. Make sure the shank of the live center and the tailstock hole are clean and free of debris and fit the live center firmly in the spindle hole by hand **H**.

MOVING TAILSTOCK QUILL IN / OUT



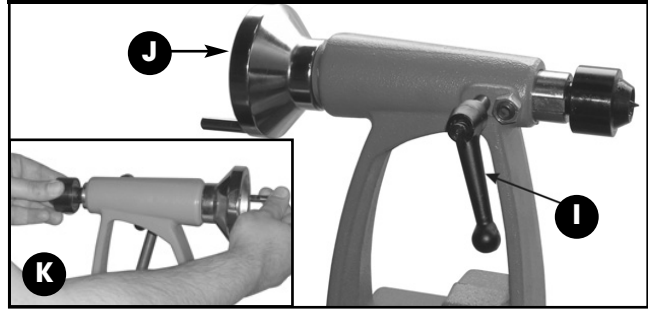
The tailstock quill can be moved in and out of the tailstock casting **L** by turning the tailstock quill movement hand wheel **M**.

TAILSTOCK MOVEMENT



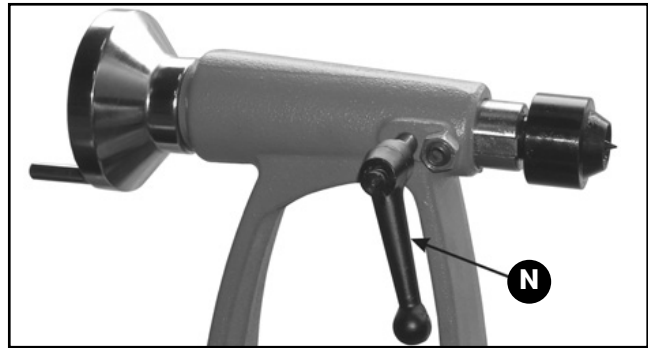
The tailstock is used to support the other end of the workpiece to be turned and can be moved along the bed slideways to suit the length of the workpiece **O**. To move the tailstock on the bed:

TAILSTOCK REAR VIEW

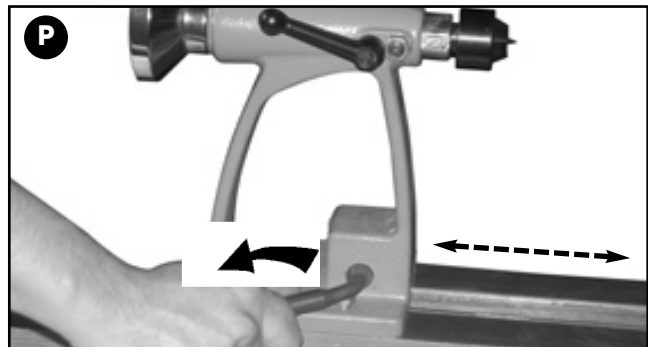


To remove the live center from the tailstock quill: loosen the tailstock quill locking lever **I** and move the quill out by turning the quill movement hand wheel **J** until the quill end is nearly inside the tailstock and the live center can be removed by hand.

Note: When removing the live center, always hold it by hand to prevent it from falling **K**.



1. To move the tailstock quill, loosen the quill locking lever **N**.
2. Turn the the quill movement hand wheel to move the quill as needed.
3. Re-tighten the quill locking lever to secure the quill in position.



1. Loosen the tailstock locking lever **P**.
2. Move the tailstock by hand to the desired location on the bed.
3. Retighten the tailstock locking lever to secure the tailstock in position.

MOUNTING A WORKPIECE TO THE FACE PLATE

For turning applications where the workpiece cannot be secured between the headstock and tailstock centers (such as bowl turning) the face plate must be used to secure the workpiece to the headstock spindle.

1. With the face plate removed from the lathe (if needed, refer back to section “Mounting & removing the headstock spur center” on page 13), mount the workpiece onto the face plate with wood screws (not included) through the mounting holes from the back of the face plate. Make sure the screws are not so long that they will enter the area of the workpiece where the material is to be removed.
2. Thread the face plate back on the lathe and tighten using the knock out bar, for leverage, and face plate wrench as shown on page 13, **D**.

INDEXING

For advanced turners, the indexing features on this 25-114QC M1 lathe allows the user to lock the spindle in place at 24 evenly spaced 15° intervals while the workpiece is installed between the centers. This is primarily used for reeding or fluting (cutting decorative grooves vertically up the length of the spindle) usually with the help of a shop made jig and router.



NEVER TURN ON THE LATHE WHEN THE HEADSTOCK SPINDLE IS LOCKED IN PLACE. ALWAYS, TURN OFF AND UNPLUG THE LATHE FROM THE POWER SOURCE, BEFORE INSERTING THE INDEXING PIN TO LOCK THE SPINDLE.

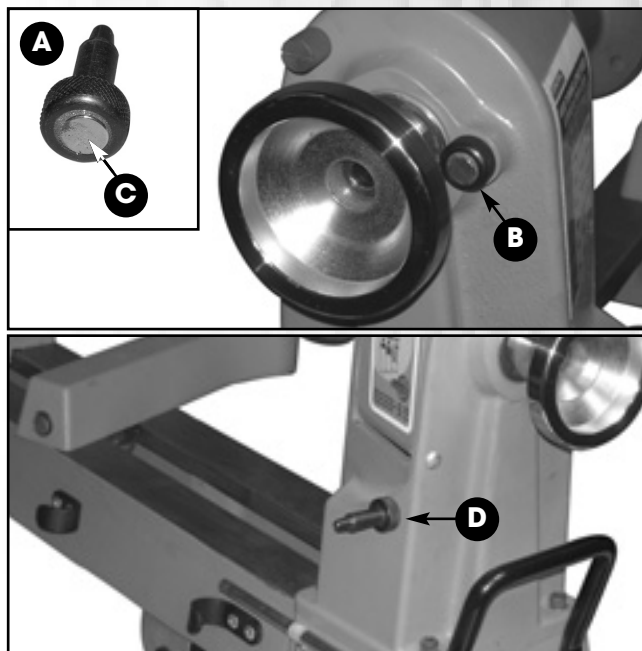
TURNING ON THE LATHE AFTER THE INDEXING PIN (OR ANY OTHER OBJECT) HAS BEEN INSERTED INTO THE HEADSTOCK INDEXING HOLE, THEREBY PREVENTING THE HEADSTOCK SPINDLE FROM TURNING, CAN LEAD TO SERIOUS INJURY, DAMAGE TO THE WORKPIECE, OR DAMAGE TO THE LATHE AND THE MOTOR.

To lock the spindle, fit and press the indexing pin **A** in the hole in the headstock as shown in **B**, while slowly turning the spindle by hand until the pin finds and bottoms out in an indexing hole.

Complete the desired cut, groove or other operation on the spindle and then remove the indexing pin. If further grooves are required insert the pin again and slowly turn the spindle until the pin locks into the next, or the desired position.

Note: There are 24 evenly spaced holes in the headstock spindle allowing for indexing at 15° increments (360°/24 positions = 15°), allowing for a wide variety of symmetrical decorative grooves or patterned cuts.

Note: The magnet **C** on the indexing pin head allows to stick it anywhere practical on the lathe for convenient onboard storage, as shown in **D**.

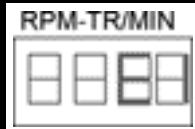


PERIODIC MAINTENANCE

- Keep the unit clean and free of dust by wiping with a cloth or vacuuming off any woodchips or dust after each use.
- All bearings are sealed and permanently lubricated and no further lubrication is required.
- Regular applications of a surface protectant/lubricant will help prevent rust and keep the tool rest, head, and tailstock sliding smooth on the bedway.
- Periodically inspect the power cord and plug for damage. Replace the power cord and the plug at the first signs of visible damage.

SPINDLE SPEED DIGITAL READOUT - ERROR MESSAGES & REMEDIES

ERROR MESSAGE E1



When the onboard heat sensor detects a running temperature above 185°F (85°C) the motor will shut off automatically and the display will show "E1".

REMEDY

Allow the machine some time to cool off. An E1 error message will clear automatically when the sensor temperature drops back down below 176°F (80° C).

ERROR MESSAGE E2



In the event of any current fluctuation causing the amperage to go above 35A, the motor will shut off automatically and the display will show "E2".

REMEDY

Press the "Stop" button to clear the error message.

ERROR MESSAGE E3



If the input voltage is higher or lower than the required voltage, the display will show "E3" along with a beeping sound to warn the user to verify the input voltage on the electrical outlet or circuit being used.

The machine will continue to operate but long term use with incorrect input voltage will burn out the speed controller circuit board and can also damage or burn out the motor.

REMEDY

Verify that the voltage on the outlet or circuit being used, matches the required voltage as shown on the motor I.D. plate of the machine.

Have a qualified electrician repair the outlet or circuit, or plug the machine into an outlet or circuit that is operating on the correct voltage.

The error message will clear automatically when the input voltage is corrected.

ERROR MESSAGE E4



If the amperage draw under load goes to 7 amps the display will show "E4" along with a beeping sound to warn the user, and if the amperage draw exceeds 9 amps the machine will automatically shut off to protect the circuitry and the motor.

REMEDY

Press the "Stop" button to clear the error message. If the problem occurs frequently, check the circuit and/or verify if any other devices are operating on the same circuit.

ERROR MESSAGE E6



If (A) the speed sensor is disconnected or somehow damaged, or if (B) the difference between the detected spindle speed and the actual motor rpm is too high, the motor will shut off automatically and the display will show "E6".

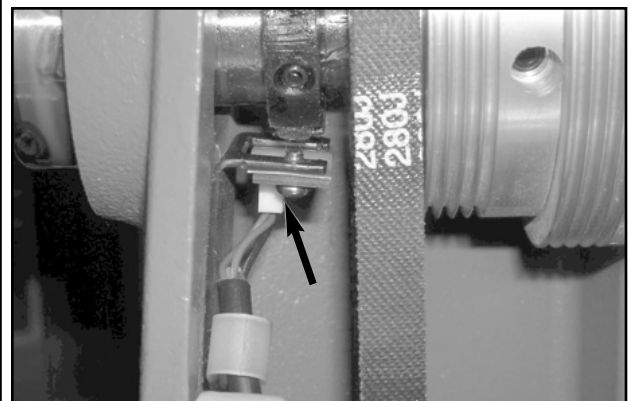
REMEDY

Turn off and unplug the machine from the power source before doing either of the following as needed:

(A) Make sure that the black wire is connected to the spindle speed sensor (see Fig. 1) and that the sensor is not damaged i.e. if the LED does not light up while operating

(B) Check to make sure there is adequate belt tension to prevent belt slippage. The error message will clear automatically once the problem has been corrected.

FIG. 1



ERROR MESSAGE E7



If (A) the white wire of the control box is not properly connected with the white wire of the motor (page 10 "Connect the control box to the motor"), or if (B) the motor sensor is disconnected or somehow damaged, the machine will either not run, or run for only a few seconds and then shut off and the display will show "E7".

REMEDY

Press the "Stop" button to clear the error message and unplug the machine from the power source before doing either of the following as needed:

(A) Refer to the section "Connect the control box to the motor" on page #10 of this manual and make sure that the white wire is connected to the motor.

(B) Make sure that the white wire is connected to the motor speed sensor and that the sensor is not damaged i.e. if the LED does not light up while operating.

ERROR MESSAGE E8



If the integrated circuit on the controller is damaged it can cause a short circuit in the system that will shut off the machine and the display will show "E8".

REMEDY

In the event of an "E8" error message, turn off and disconnect the machine from the power source and contact the local retailer, or our service department, for assistance with this repair.

NOTES

RECOMMENDED OPTIONAL ACCESSORIES

A large range of optional aftermarket accessories can be used with this lathe. Your local dealer may be able to offer suggestions based on what is readily available in your area.

Key issues to keep in mind when shopping for aftermarket accessories are:

Headstock and tailstock feature a MT#2 taper – to avoid damaging the lathe use only headstock and tailstock centers with a matching taper.

Headstock spindle threads are 1" diameter x 8 threads per inch (T.P.I.) – to avoid stripping or damaging the threads, use only threaded headstock attachments (such as face plates and jaw chucks) that have matching threads.

We also offer a large variety of products to help you increase convenience, productivity, accuracy and safety when using your wood lathe. Here's a small sampling of optional accessories available from your local General International dealer.

For more information about our products, please visit our website at www.general.ca



Maxi-Lathe Stand #25-195

Free-up valuable bench space in your shop and mount your lathe to dedicated stand. Easy to assemble. This sturdy steel stand is designed specifically to fit General International models 25-100, 25-114QC, 25-200 Maxi Lathes.

23" Bed Extension for 40" between centers - #25-116

For longer turnings an optional 23" bed extension, can be added.



4" - 4 Jaw Scroll Chuck - #25-105

Designed specifically for use on lathes with 1" dia. x 8 TPI headstock threads.



Portable Dust Collector - #10-050M1

Designed for flexibility and mobility. Featuring an adjustable multi-position support arm and a wide, rotating dust hood this unit is ideal for use on wood lathes.

4 Piece Woodturning Chisel Set - #25-210

Made from hi-speed steel this kit comes in it's own wooden carrying case and features 4 of the most commonly used turning tools including a 3/4" parting tool, a 1/2" round nose scraper, a 1" skew chisel and 1/2" bowl gouge.



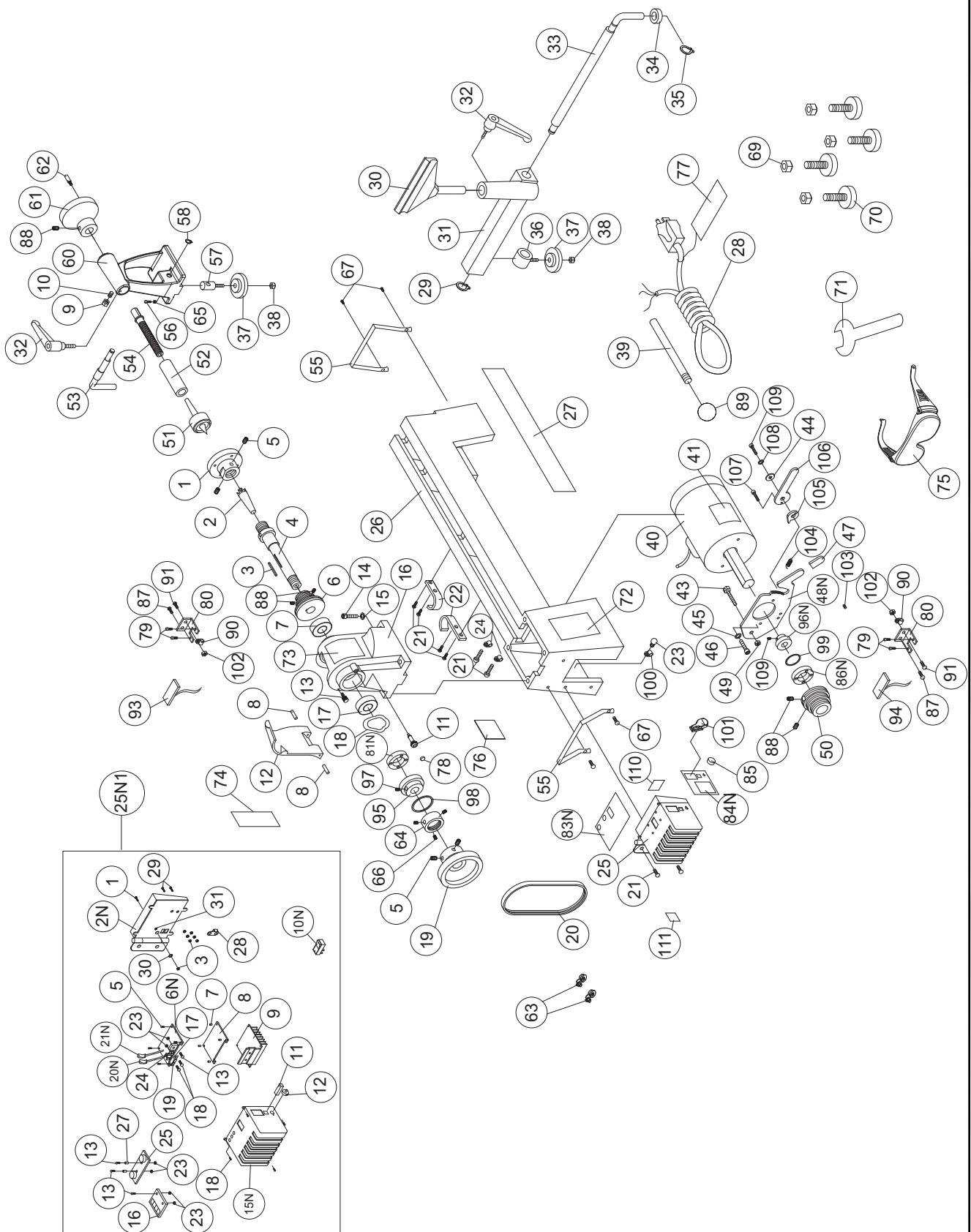
5 Piece Woodturning Mini-Chisel Set - #25-250

Made from high quality high-speed steel with solid hardwood handles.

Designed specially for smaller turning such as pen making and other small hobby type projects.

Includes a 3/4" diamond parting tool, a 1/2" round nose scraper, a 1" skew chisel, and a 1/2" bowl gouge.

PARTS DIAGRAM



PARTS LIST **25-114QC**

PART NO.	DESCRIPTION	SPECIFICATION	QTY
25114-01	FACE PLATE	3"	1
25114-02	SPUR CENTER	MT2	1
25114-03	KEY	5X5X25	1
25114-04	SPINDLE	1"-8UNC	1
25114-05	SET SCREW	1/4-20X1/4	5
25114-06	SPINDLE PULLEY	3 SPEED	1
25114-07	BEARING	6005	1
25114-08	SET SCREW	3MMX16MM	2
25114-09	NUT	M10	1
25114-10	SET SCREW	M10X1.5P	1
25114-11	LOCK PIN		1
25114-12	BELT GUARD		1
25114-13	KNOB		1
25114-14	CAP SCREW	1/4X1"	4
25114-15	LOCK WASHER	1/4"	4
25114-16	HEAD STOCK		1
25114-17	BEARING	6004	1
25114-18	WAVE WASHER	S-18	1
25114-19	HAND WHEEL		1
25114-20	DRIVE BELT	280J-4V	1
25114-21	PHILLIPS HEAD SCREW	#10-24X5/16"	8
25114-22	CABLE HOOK		2
25114-23	PHILLIPS HEAD SCREW	#10-24X3/4"	1
25114-24	CORD SNAP RING		3
25114-25N1	CONTROL BOX ASSEMBLY		1
25114-25-1	PHILLIPS HEAD SCREW	#10-24X5/16"	1
25114-25-2N	CONTROL BOX MOUNTING BRACKET		1
25114-25-3	NUT	#10-24	7
25114-25-5	PHILLIPS HEAD SHEET METAL SCREW	M3X20MM	4
25114-25-6N	PC BOARD		1
25114-25-7	SPACER		4
25114-25-8	PARTITION PLATE		1
25114-25-9	HEAT SINK		1
25114-25-10N	SWITCH		1
25114-25-11	CIRCUIT BREAKER	8AMP	1
25114-25-12	VR CONTROL		1
25114-25-13	PHILLIPS HEAD SHEET METAL SCREW	M3X15MM	10
25114-25-15N	CONTROL BOX		1
25114-25-16	SPEED DISPLAY		1
25114-25-17	PARTITION PLATE		1
25114-25-18	SCREW	M3X10MM	8
25114-25-19	PARTITION SPACER		2
25114-25-20N	HEAD STOCK SENSOR		1
25114-25-21N	MOTOR SENSOR		1
25114-25-23	NUT	M3	6
25114-25-24	BRACKET		1
25114-25-25N	SWITCH BUTTON		1
25114-25-27	LONG SPACER	10MM	2
25114-25-28	SPRING PLATE		1
25114-25-29	SCREW	#10-24X1/2"	2
25114-25-30	SPROCKET WASHER	#10-24	1
25114-25-31	GROUND LABEL		1
25114-26	BED		1
25114-27	LABEL		1
25114-28	POWER CORD		1
25114-29	S-RING	S-12	1
25114-30	TOOL REST	6"X1"	1
25114-31	TOOL REST CARRIAGE		1
25114-32	LOCKING HANDLE	5/16"X15MM	2
25114-33	ECCENTRIC SHAFT		1
25114-34	BUSHING		1
25114-35	S-RING	S-14	1
25114-36	CLAMP BOLT		1
25114-37	FIXING PIECE		2
25114-38	NUT	M10X1.5P	2
25114-39	KNOCKOUT BAR		1
25114-40	MOTOR	3/4HP-60HZ	1

PARTS LIST **25-114QC**

PART NO.	DESCRIPTION	SPECIFICATION	QTY
25114-41	MOTOR LABEL		1
25114-43	SCREW	5/16-18X1-1/4	1
25114-44	WASHER	5/16-3MM	1
25114-45	WASHER	1/4	2
25114-46	CAP SCREW	1/4-20X5/8	2
25114-47	BLACK HANDLE PROTECTOR		1
25114-48N	MOTOR PLATE		1
25114-49	LOCK NUT	5/16-18UNC	1
25114-50	MOTOR PULLEY	3 SPEED	1
25114-51	LIVE CENTER	MT2	1
25114-52	QUILL		1
25114-53	ECCENTRIC SHAFT		1
25114-54	LEAD SCREW		1
25114-55	CARRYING HANDLE		2
25114-56	CAP SCREW	1/4"-20UNCX3/8	1
25114-57	CLAMP BOLT		1
25114-58	S-RING	S-10	1
25114-60	TAILSTOCK		1
25114-61	HAND WHEEL		1
25114-62	HAND WHEEL HANDLE		1
25114-63	STRAIN RELIEF	6B3-2	2
25114-64	COLLAR		1
25114-65	NUT		1
25114-66	SET SCREW	3/16"X1/4"	3
25114-67	PHILLIPS HEAD SCREW	1/4"-20X5/8"	4
25114-69	NUT	3/8"	4
25114-70	LEVELING FOOT	3/8"	4
25114-71	FACE PLATE WRENCH		1
25114-72	WARNING LABEL		1
25114-73	LABEL		1
25114-74	SPEED LABEL		1
25114-75	SAFTY GOGGLE		1
25114-76	I.D. LABEL		1
25114-77	HANDING LABEL		1
25114-78	MAGNET	Ø10MM-5MM	1
25114-79	PHILLIPS HEAD SCREW		4
25114-80	SENSOR BRACKET		2
25114-81N	SPINDLE MAGNET RING		1
25114-83N	CONTROL LABEL		1
25114-84N	CONTROL LABEL		1
25114-85	VR KNOB		1
25114-86N	MOTOR MAGNET RING		1
25114-87	PHILLIPS HEAD SCREW	#10-24X5/8"	2
25114-88	SET SCREW	1/4"-20UNCX3/8	5
25114-89	KNOB	3/8"	1
25114-90	CORD SNAP RING		2
25114-91	PHILLIPS HEAD SCREW	#10-24X1/4"	2
25114-93	SPINDLE SENSOR		1
25114-94	MOTOR SENSOR		1
25114-95N	SPINDLE MAGNET RING BASE		1
25114-96N	MOTOR MAGNET RING BASE		1
25114-97	SET SCREW	M4X5MM	2
25114-98	C-RING	S-28	1
25114-99	C-RING	S-18	1
25114-100	CORD SNAP RING	1/4"	1
25114-101	SWITCH		1
25114-102	NYLON NUT		1
25114-103	SET SCREW		1
25114-104	SPRING		1
25114-105	LOCKING PLATE		1
25114-106	HANDLE		1
25114-107	CAP SCREW		1
25114-108	LOCK WASHER		1
25114-109	CAP SCREW	5/16"	1
25114-110	LABEL		1
25114-111	LABEL		1

MODEL 25-114QC



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orderdesk@general.ca
www.general.ca

IMPORTANT

When ordering replacement parts, always give the model number, serial number of the machine and part number. Also a brief description of each item and quantity desired.